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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,580	10/24/2003	Boris S. Jacobson	RTN-183AUS	9035
33164	7590	01/07/2010		
RAYTHEON COMPANY C/O DALY, CROWLEY, MOFFORD & DURKEE, LLP 354A TURNPIKE STREET SUITE 301A CANTON, MA 02021			EXAMINER CAVALLARI, DANIEL J	
			ART UNIT 2836	PAPER NUMBER
			NOTIFICATION DATE 01/07/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@dc-m.com  
amk@dc-m.com

### Office Action Summary

**Application No.**

10/692,580

**Applicant(s)**

JACOBSON ET AL.

**Examiner**

DANIEL CAVALLARI

**Art Unit**

2836

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 and 33 is/are allowed.
- 6) ☒ Claim(s) 15-17 and 32 is/are rejected.
- 7) ☒ Claim(s) 18-31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

As a preliminary matter, Applicant's improper RCE of 5/28/2009 after the non-final office action of 12/29/2008 has been corrected by Applicant's response of 9/10/2009 to the "Notice of Improper Request for Continued Examination" of 9/1/2009.

Therefore, this action is in response to the claims of 5/28/2009. This action is made final because of the amendments to the claims of 5/28/2009 after the non-final office action of 12/29/2008.

#### ***Election/Restrictions***

As discussed in the interview of August 25, 2009, the previously made restriction requirement of 8/11/2009 has been withdrawn.

#### ***Response to Arguments***

The previously made 112, first paragraph rejection of claims 1-33 and 112, second paragraph rejection of claims 1-33 have been withdrawn.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Page US4,467,220.

In regard to claim 15

A power system comprising (see fig10a):

a common power source component (ie node S1, see fig10a and column 11, lines 47-64);

at least two or more power system subsystem components (S2-S4) the two or more power system subsystem components comprising k power system subsystem components (S2-S4); and

a plurality of direct, independent electrical interconnects (1a-1c) to connect said common power source component individually to each one of the k power system subsystem components, each respective direct, independent electrical interconnect originating at the common power source component and terminating at a respective one of the k power subsystem components without coupling to any of the other k power subsystem components or to any other element in the power system, wherein the direct independent electrical interconnect comprises one or more conductors (see column 11, lines 46-53).

In regard to claim 32

The power system of claim 15 wherein said power system supplies power in at least one mode, said at least one mode selected from the group consisting of a single power mode wherein a single power source supplies power for said power system, a simultaneous power mode wherein a first power source provides power to a first power source subsystem component and wherein a second power source provides power to a second power source subsystem component (independent subsystem operation, see column 12, lines 48-68), and a sequential mode wherein a

first power source provides power for said power system for a first time interval and a second power source provides power for said power system for a second time interval.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Page US4,467,220 in view of Whyte US3,911,415.

Incorporating all arguments above, Page teaches a power system comprising a full mesh network connection (see figure 10a) interconnecting power sources/loads (see column 11, lines 46-53). Page fails to explicitly teach one of the interconnects comprising a control signal interconnect.

Whyte teaches a power system comprising an interconnect between load subsystems comprising a power interconnect (24B, fig1) and a control signal interconnect (43A, 43B) wherein the control signal is one of electrical (telephone) and wireless (See column 6, lines 49-66).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the power and communication interconnects taught by Whyte in place

into the system of Page who teaches only power interconnects. The motivation would have been to provide a communication means for automation between the electrical subsystems.

*Allowable Subject Matter*

Claims 1-14 and 33 are allowed.

Claims 18-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In regard to independent claims 1 and 33

Page teaches a switching device in a mesh format for coupling power sources/loads (See fig10a). However, prior art fails to teach the power system common power source subsystem mesh configuration further comprising the particular switch, regulator, regulated and unregulated bus configuration of claim 1.

In regard to independent claim 7 and dependant claims 18 and 19

Page teaches a switching device in a mesh format for coupling power sources/loads (See fig10a). However, prior art fails to teach the power system common power source subsystem mesh configuration further comprising the particular switch, regulator, regulated and unregulated bus and controller configuration.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Cavallari whose telephone number is 571-272-8541. The examiner can normally be reached on Monday-Thursday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jared Fureman can be reached at (571)272-2391. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel Cavallari/

January 2, 2010

/Fritz M Fleming/

Primary Examiner, Art Unit 2836